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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,570	04/13/2006	Jurgen Beil	5367-189PUS	3837

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COHEN, PONTANI, LIEBERMAN & PAVANE
551 FIFTH AVENUE
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NEW YORK, NY 10176

EXAMINER

CROWE, DAVID R

ART UNIT	PAPER NUMBER
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2885

MAIL DATE	DELIVERY MODE
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08/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/551,570		BEIL ET AL.	
	Examiner		Art Unit	
	David R. Crowe		2885	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/29/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 5, 6, 17 and 18 are objected to because of the following informalities:
The claims as written lack antecedent basis for "the basic set". The dependencies of the claims should be changed to claims 3 and 15 respectively. Appropriate correction is required.
2. Claims 11 and 23 are objected to because of the following informalities: The claims as written lack antecedent basis for "the luminous body" and "the light input part". Appropriate correction is required.
3. Claims 4 and 15 are objected to because of the following informalities: It is unclear how the luminous modules are in fact luminous if only some of them have light sources (LED's). Appropriate correction is required.
4. Claims 12 and 24 are objected to because of the following informalities: The claims lack antecedent basis for "the LED's". Dependence on claims 8 and 20 respectfully, is suggested. Appropriate correction is required.

NOTE: The claims are generally narrative and indefinite, failing to conform with current U.S. practice, particular with respect to article usage as it relates to antecedent basis in the claims. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

6. Claims 5-7 and 17-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claims 5-7 and 17-19 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: a method of selecting the modules out of the group. It is unclear from the claim why the group even exists since no limitation is provided for selecting the sizes for being put together and only that they seem to exist.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-3, 9-11, 13-15, and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Higuchi et al (US 6,241,358).

Re claims 1 and 13: Higuchi discloses a lighting apparatus with a polygonal lamination area comprising a plurality of individual polygonal luminous modules [L and

BL] arranged in modular fashion. The method would be an inherent result from the disclosure of the apparatus that the modules are to be put together has suggested by the arrow pointing BL1 toward BL2 in figure 3. [See figures 2-4, columns 4-7]

Re claims 2 and 14: Higuchi discloses the luminous area is rectangular and is made up of individual rectangular luminous modules. [See figure 4]

Re claims 3 and 15: Higuchi shows BL3 being shorter than BL2 in figure 4 therefore disclosing a set of different-sized modules.

Re claims 9 and 21: Higuchi discloses external areas [26] of the luminous modules, which are not light exit area [25] or light entry areas [22] are at least partly provided with a reflective coating [reflector 23].

Re claims 10 and 22: Higuchi discloses a luminous body [BL] of the luminous module is provided whose cross section tapers as the distance from the light input part [22] increases. [See figure 2]

Re claims 11 and 23: Higuchi discloses wherein the thickness of the luminous body [BL] next to the light input area [22b] is greater than the thickness of the light input part [22], with a step [22a] being formed such that the luminous modules overlap when put together to form a luminous area such that the light input part is covered by the adjacent luminous module. [See figures 3 and 4].

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 4, 8, 16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higuchi in view of Ohtsuki et al (US 6,036,328). The teachings of Higuchi have been discussed above.

Higuchi fails to teach using light emitting diodes with the light input part.

Ohtsuki discloses using LED's [50] to illuminate the light input part [50a] of a luminous body [50] for use with a display. [See column 16 line 21 through column 17 line.29.]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace each of the fluorescent light sources of Higuchi with the light source [51] of Ohtsuki, which includes a plurality of LED's [53] in order to improve energy efficiency, life-space of the light sources, and reduce space requirements as are commonly known advantages of replacing CCFL light sources with LED units.

12. Claims 5-7 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higuchi. The teachings of Higuchi have been discussed above.

Although Higuchi fails to teach the light modules being selected from a group of four units with the specific relative dimension claimed, as best understood, it would have been obvious to one of ordinary skill in the art to have a variety of dimensions of modules available in standard sizes. Displays, such as large LCD displays are commonly known to be available in a variety of standard diagonal lengths and have

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uniform length to width ratios therefore making it obvious to one of ordinary skill in the art to create the claimed configuration. Further the claim fails to provide why these dimensions are selected since it is not a requirement that any particular combination be used. Therefore as disclosed in figure 1 of the instant application it is completely acceptable to create a display from all of the same dimensioned modules which results in there being no critical reason for having the other members of the basic set in the first place. The particular claimed configuration is just one of numerous configurations a person of ordinary skill in the art would find obvious for the purpose of providing mating surfaces of modules capable of forming a rectangular luminous area. In re Dailey 149 USPQ 47, 50 (CCPA 1966). See also Clue Co. v. Upton 97 US 3, 24 (USSC 1878).

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Takemoto (US 2001/0053072) Planar light source apparatus.

Ito et al (US 6,464,367) Surface light source system.

Cho (US 6,580,477) LCD including at least tow light guide plates arranged in parallel.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David R. Crowe whose telephone number is 571-272-9088. The examiner can normally be reached on 7:30AM-5:00PM w/first Friday off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong-Suk (James) Lee can be reached on 571-272-7044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David R Crowe
Examiner
Art Unit 2885

DRC



JONG-SUK (JAMES) LEE
SUPERVISORY PATENT EXAMINER